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(54) Title: PROCESS FOR THE MANUFACTURE OF TRIMETHYLHYDROQUINE DIALKANOATES

(57) Abstract: The present invention is directed to a process for the manufacture of a 2,3,5-trimethylhydroquinone dialkanoate comprising reacting ketoisophorone with an acylating agent in the presence of an indium salt as the catalyst. Preferred are indium(III) salts such as indium trichloride or indium tris (trifluoromethanesulfonate). Further aspects of the present invention are a process for the manufacture of 2,3,5-trimethylhydroquinone using 2,3,5-trimethylhydroquinone dialkanoate as the starting material, especially a process for the manufacture of 2,3,5-trimethylhydroquinone by transesterification of 2,3,5-trimethylhydroquinone dialkanoate, as well as a process for the manufacture of a-tocopherol and its alkanoates, especially of (all-*rac*)-a-tocopherol and its acetate, comprising the reaction of ketoisophorone to 2,3,5-trimethylhydroquinone dialkanoate according to the present invention. Furthermore, the present invention also deals with a process for the manufacture of formulations of a-tocopherol and its alkanoates, especially of formulations of (all-*rac*)-a-tocopherol and its acetate, comprising the reaction of ketoisophorone to 2,3,5-trimethylhydroquinone dialkanoate according to the present invention.



WO 2005/058792 A1